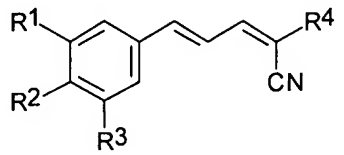
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A compound of Formula I, or a salt, solvate, or hydrate thereof:



I

wherein

R^1 and R^2 are each independently selected from H, OH, C_{1-6}alkyl, C_{1-6}alkoxy, C_{1-6}alkylCO_2, NH_2, NH-C_{1-6}alkyl, N(C_{1-6}alkyl)(C_{1-6}alkyl), C_{1-6}alkyl(C=O)NH, C_{1-6}alkyl(C=O)N(C_{1-6}alkyl), SH, S-C_{1-6}alkyl, O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl), NO_2, CF_3, OCF_3 and halo, or R^1 and R^2 together represent O-C_{1-6}alkyl-O, thereby forming a ring;

R^3 is selected from H, OH, C_{1-6}alkyl, C_{1-6}alkoxy, C_{1-6}alkylCO_2, NH_2, NH-C_{1-6}alkyl, N(C_{1-6}alkyl)(C_{1-6}alkyl), C_{1-6}alkyl(C=O)NH, C_{1-6}alkyl(C=O)N(C_{1-6}alkyl), SH, S-C_{1-6}alkyl, O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl), NO_2, halo and CH_2-S-$(CH_2)_n$ Ar;

R^4 is selected from C(X)R^5, SO_3Ar, NH_2, NH-C_{1-6}alkyl, N(C_{1-6}alkyl)(C_{1-6}alkyl), P(O)$(OH)_2$, P(O)$(OC_{1-6}$alkyl$)_2$, and C(NH_2)=C$(CN)_2$;

X is selected from O, S, NH and N-C_{1-6}alkyl;

R^5 is selected from NH_2, OH, NH$(CH_2)_p$Ar, NH$(CH_2)_p$OH, $(CH_2)_p OC_{1-6}$alkyl, C_{1-6}alkyl, C_{1-6}alkoxy, $NHNH_2$, NHC(O)NH_2, NHC(O)C_{1-6}alkoxy, N-morpholino and N-pyrrolidino; and

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from OH, C_{1-6}alkyl, C_{1-6}alkoxy, NH_2, NH-C_{1-6}alkyl, N(C_{1-6}alkyl)(C_{1-6}alkyl), SH, S-C_{1-6}alkyl, NO_2, CF_3, OCF_3 and halo;

n is 0 to 4; and

p is 1-4;

provided that at least one of R^1, R^2, and R^3 is selected from C_{1-6}alkylCO_2, C_{1-6}alkyl(C=O)NH, or C_{1-6}alkyl(C=O)N(C_{1-6}alkyl); or

R^1 and R^2 together represent O-C_{1-6}alkyl-O, thereby forming a ring.

2. (Withdrawn) The compound according to claim 1, wherein R^1 and R^2 are each independently selected from H, OH, C_{1-4}alkyl, C_{1-4}alkoxy, C_{1-4}alkylCO_2, NH_2, NH-C_{1-4}alkyl, C_{1-4}alkyl(C=O)NH, C_{1-4}alkyl(C=O)N(C_{1-4}alkyl), SH, S-C_{1-4}alkyl, O-Si(C_{1-4}alkyl)(C_{1-4}alkyl)(C_{1-4}alkyl), NO_2, CF_3, OCF_3 and halo, or R^1 and R^2 together represent O-C_{1-6}alkyl-O, thereby forming a ring.

3. (Withdrawn) The compound according to claim 2, wherein R^1 and R^2 are each independently selected from the group consisting H, OH, OCH_3, CH_3CO_2, O-Si$(CH_3)_2(^tBu)$, S-Me, SH, CH_3CONH, CH_3CONCH_3, and NO_2.

4. (Withdrawn) The compound according to claim 3, wherein R^1 and R^2 are both OH or R^1 and R^2 are both OCH_3.

5. (Withdrawn) The compound according to claim 4, wherein R^1 is OCH_3 and R^2 is OH.

6. (Original) The compound according to claim 1, wherein R^3 is selected from H, OH, C_{1-4}alkyl, C_{1-4}alkoxy, C_{1-4}alkylCO_2, NH_2, NH-C_{1-4}alkyl, N(C_{1-4}alkyl)(C_{1-4}alkyl), C_{1-4}alkyl(C=O)NH, C_{1-4}alkyl(C=O)N(C_{1-4}alkyl), SH, S-C_{1-4}alkyl, NO_2 and halo.

7. (Currently Amended) The compound according to claim 6, wherein R^3 is selected ~~fromselected~~ from H, OH, OCH_3, CH_3CO_2, SH, SMe, NO_2, CH_3CONH, CH_3CONCH_3, and halo.

8. (Withdrawn) The compound according to claim 1, wherein R^1, R^2, and R^3 are each independently selected from H, C_{1-4}alkylCO_2, C_{1-6}alkyl(C=O)NH, and C_{1-6}alkyl(C=O)N(C_{1-6}alkyl), provided that at least one of R^1, R^2, and R^3 is not hydrogen.

9. (Currently Amended) The compound according to claim 1, wherein R^4 is selected ~~fromselected~~ from $C(X)R^5$ and $C(NH_2)=C(CN)_2$.

10. (Original) The compound according to claim 9, wherein R^4 is $C(X)R^5$.

11. (Currently Amended) The compound according to claim 10, wherein X is selected ~~fromselected~~ from O and S.

12. (Currently Amended) The compound according to claim 10, wherein R^5 is selected ~~fromselected~~ from NH_2, OH, $NH(CH_2)_pAr$, $NH(CH_2)_pOH$ and C_{1-4}alkoxy.

13. (Original) The compound according to claim 12, wherein p is 1-3.

14. (Currently Amended) The compound according to claim 13, wherein R^5 is selected ~~fromselected~~ from NH_2, OH, $NH(CH_2)_pAr$, $NH(CH_2)_pOH$ and OCH_3.

15. (Original) The compound according to clam 14, wherein p is 1-2.

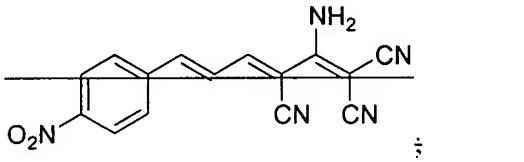
16. (Currently Amended) The compound according to claim 1, wherein Ar is an unsubstituted phenyl group or a phenyl group substituted with 1-4 substituents optionally selected ~~fromselected~~ from OH, C_{1-6}alkyl, C_{1-6}alkoxy, NH_2, NH-C_{1-6}alkyl, N(C_{1-6}alkyl)(C_{1-6}alkyl), SH, S-C_{1-6}alkyl, NO_2, CF_3, OCF_3 and halo.

17. (Currently Amended) The compound according to claim 14, wherein Ar is an unsubstituted phenyl group or a phenyl group substituted with 1-4 substituents optionally selected ~~fromselected~~ from OH, C_{1-6}alkyl, C_{1-6}alkoxy, NH_2, NH-C_{1-6}alkyl, N(C_{1-6}alkyl)(C_{1-6}alkyl), SH, S-C_{1-6}alkyl, NO_2, CF_3, OCF_3 and halo.

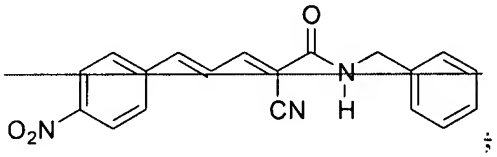
18. (Currently Amended) The compound according to any of claims 16 and 17, wherein Ar is an unsubstituted phenyl group or phenyl group substituted with 1-2 substituents optionally selected ~~fromselected~~ from OH, C_{1-4}alkyl, C_{1-4}alkoxy, NH_2, NH-C_{1-4}alkyl, N(C_{1-4}alkyl)(C_{1-4}alkyl), SH, S-C_{1-4}alkyl, NO_2, CF_3, OCF_3 and halo.

19. (Original) The compound according to claim 18, wherein Ar is an unsubstituted phenyl group or phenyl group substituted with 1-2 substituents optionally selected from OH, OCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, SH, SCH_3, CF_3, OCF_3 and halo.

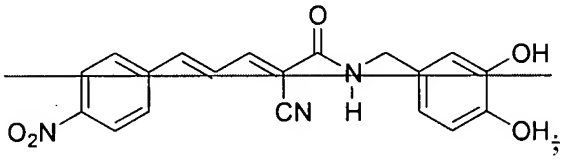
20. (Currently Amended) A compound selected from:



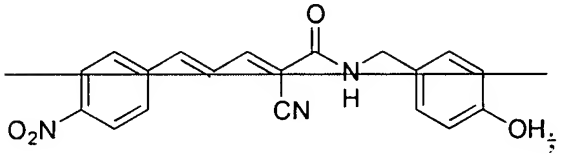
;



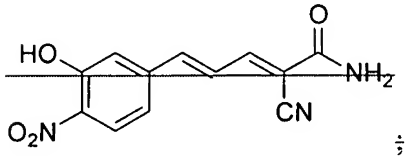
;



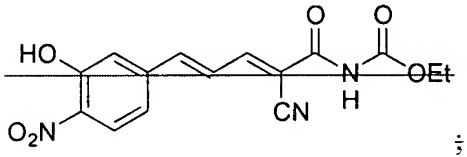
;



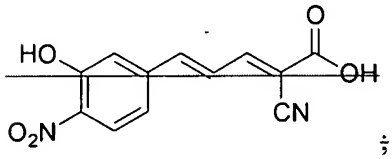
;



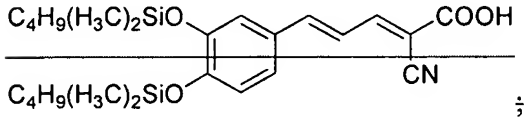
;



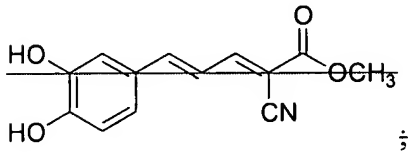
;



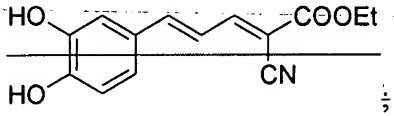
;



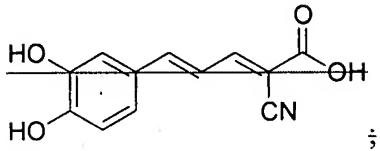
;



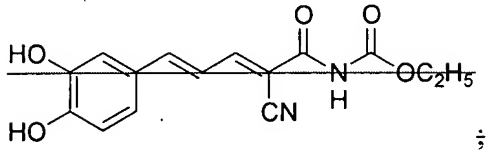
;



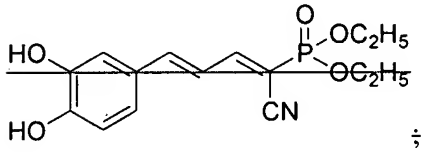
;



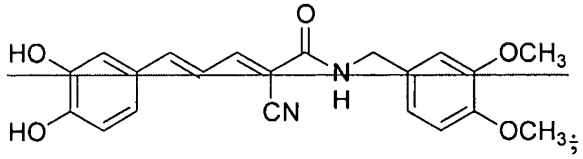
;



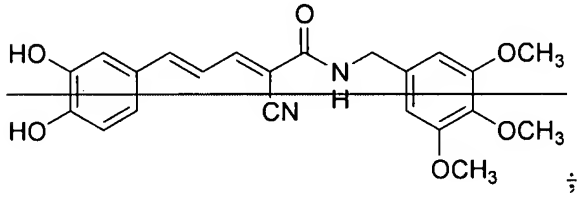
;



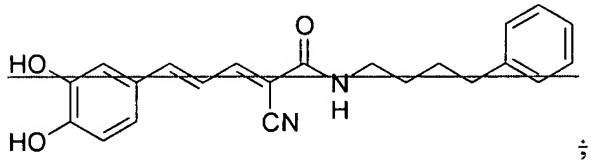
;



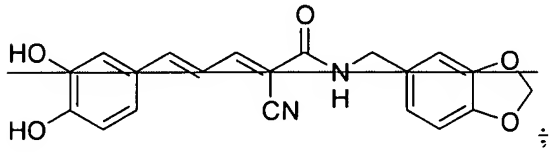
;



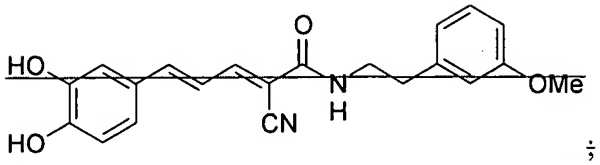
;



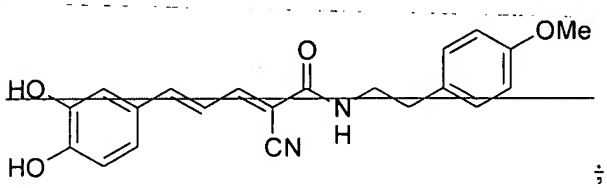
;



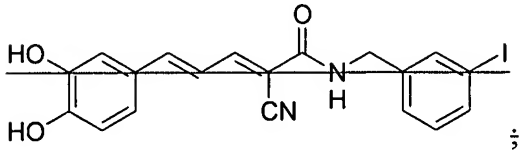
;



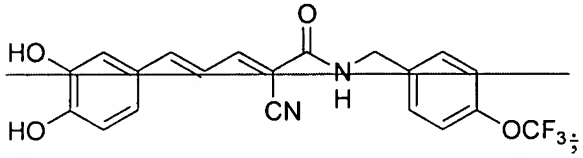
;



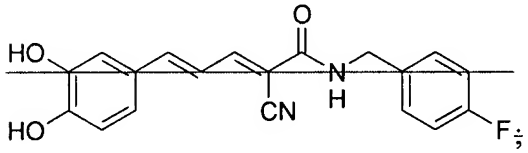
;



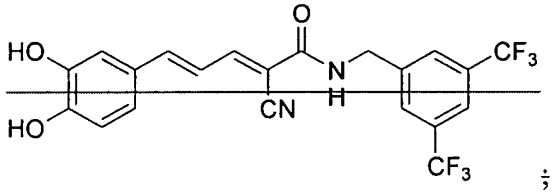
;



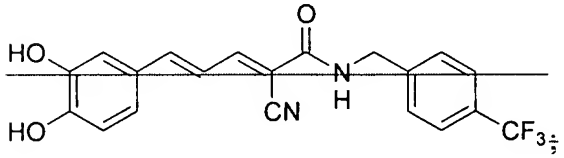
;



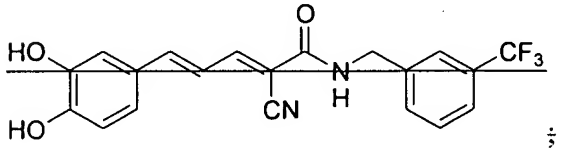
;



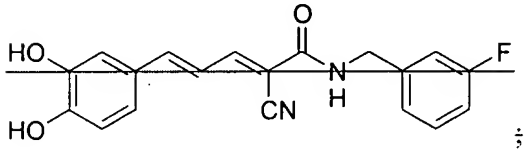
;



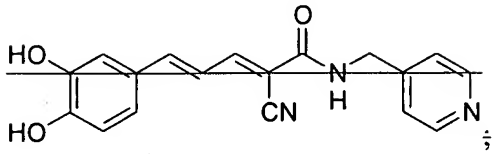
;

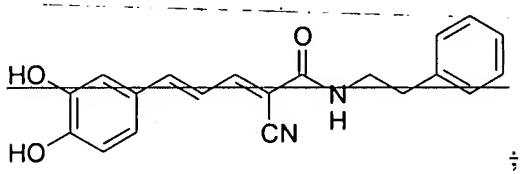


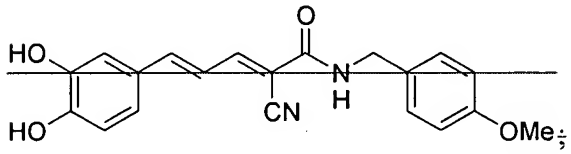
;

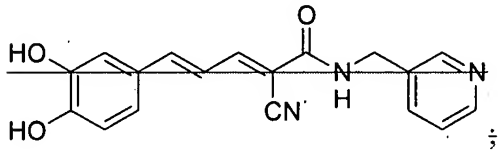


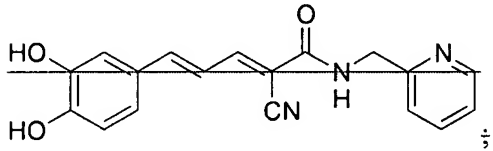
;

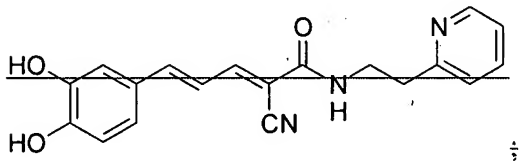


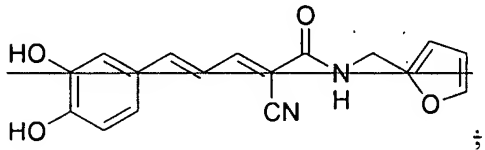


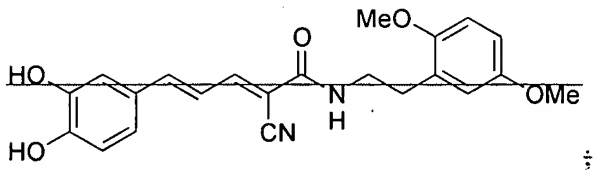


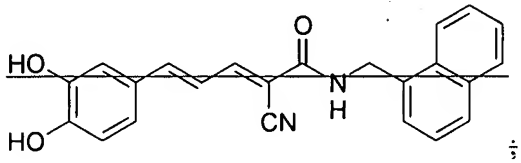


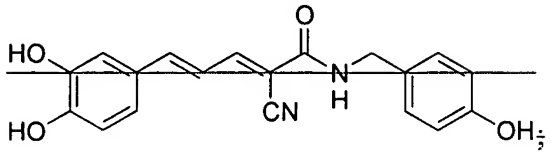


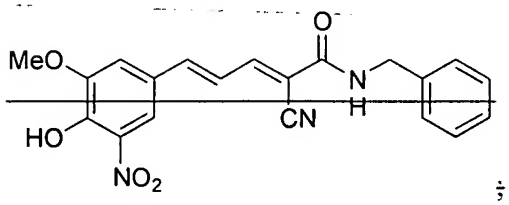


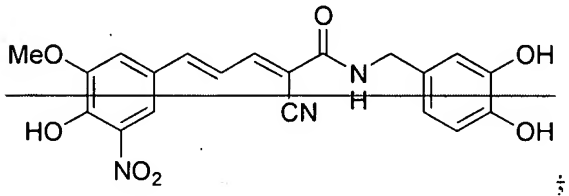


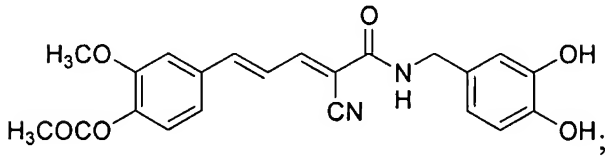


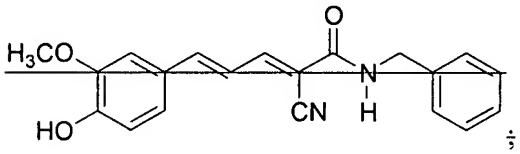


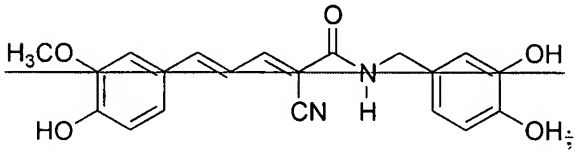


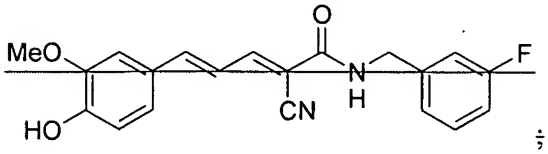


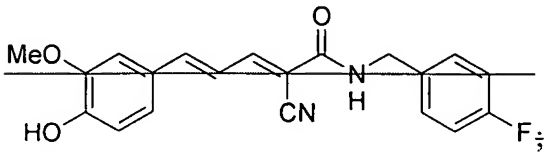


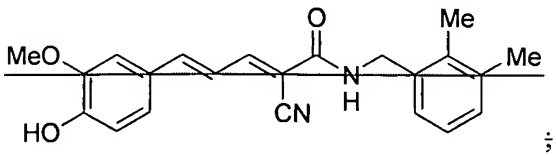


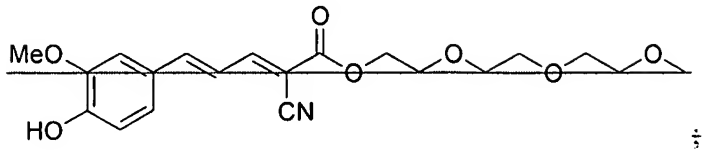


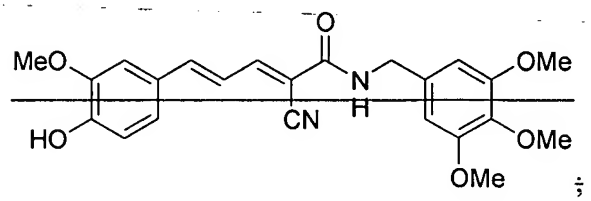


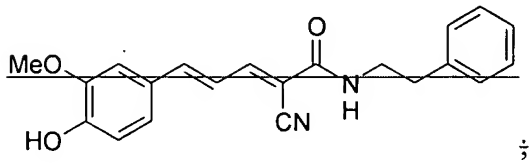


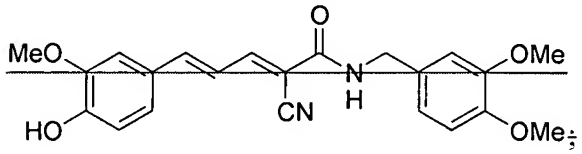


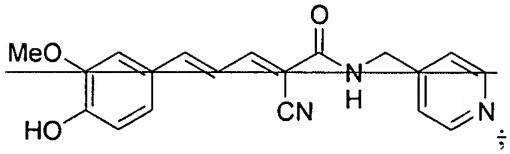


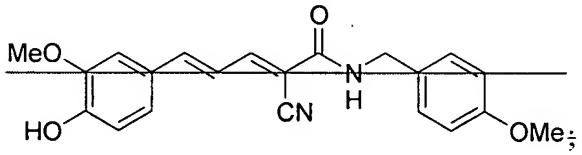


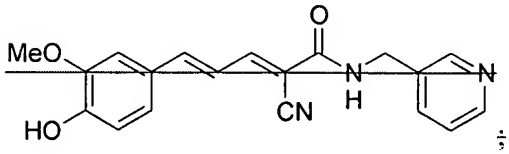


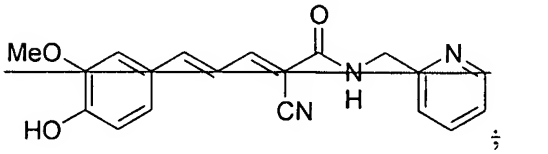


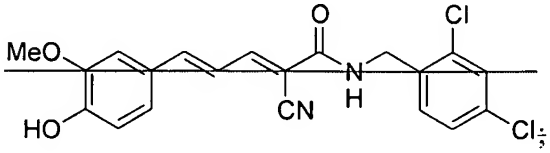


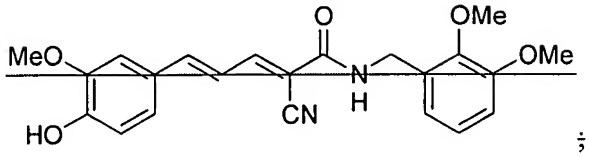


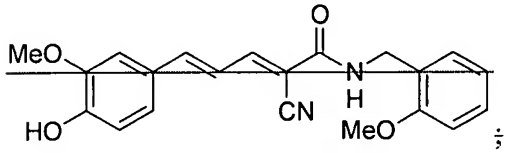


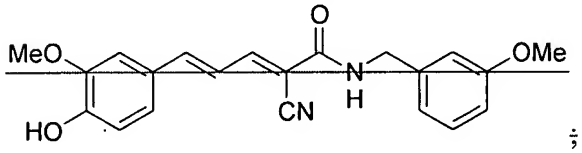


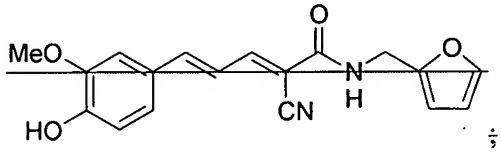


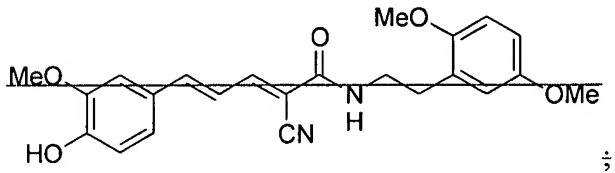


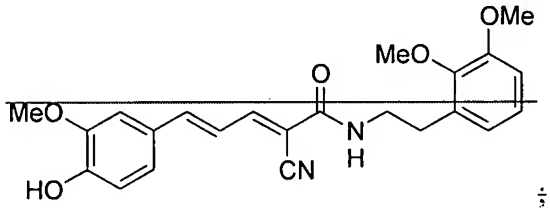


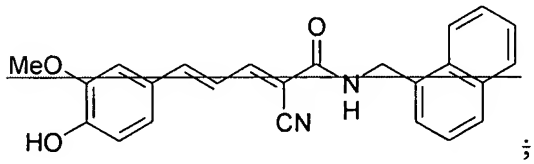


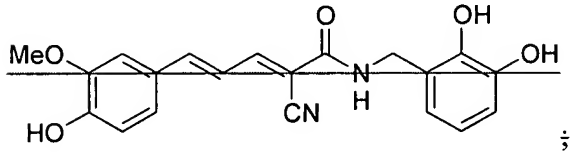


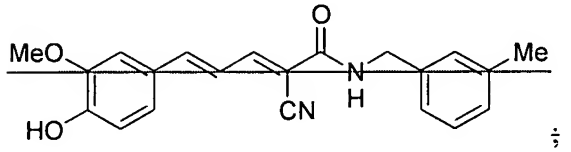


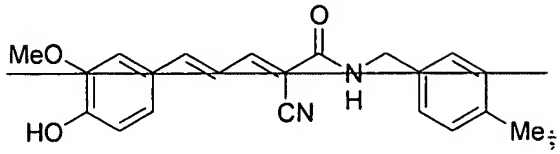


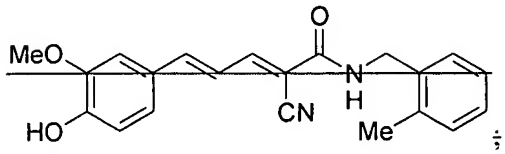


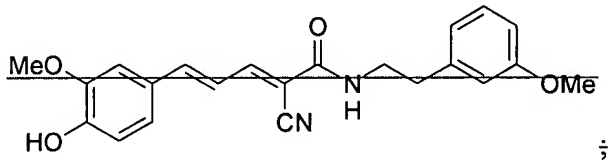


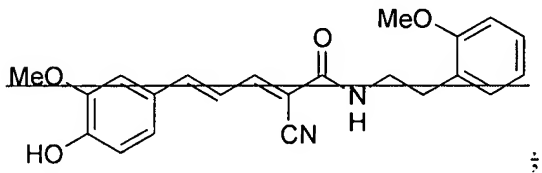


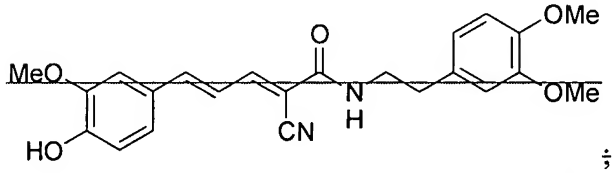


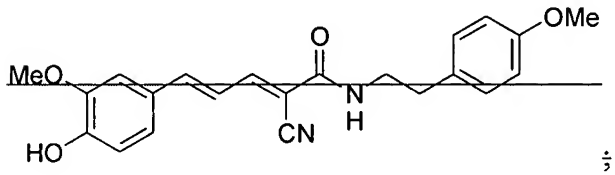


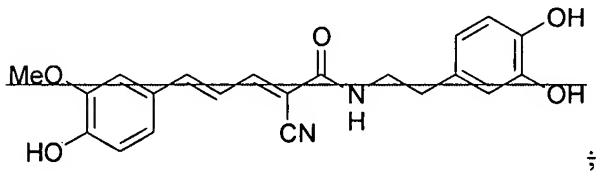


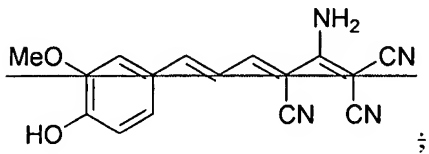


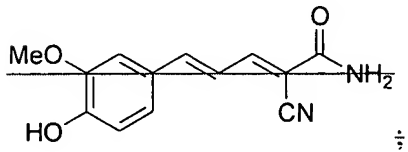


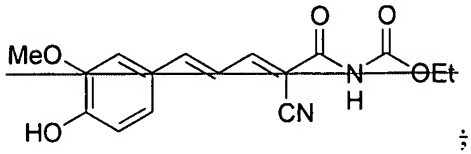




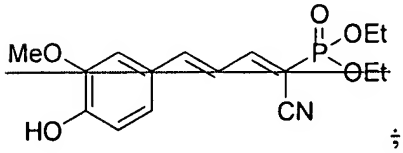




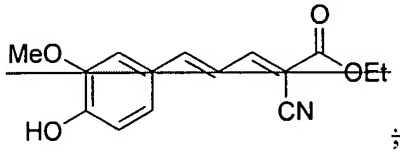




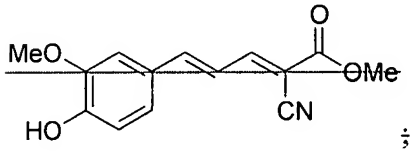
;



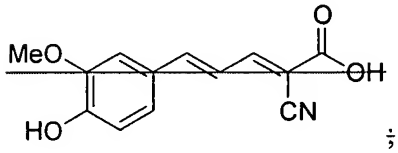
;



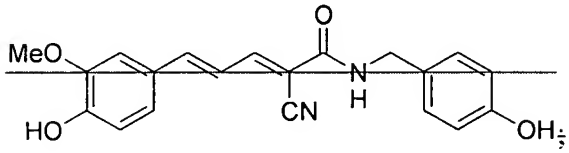
;



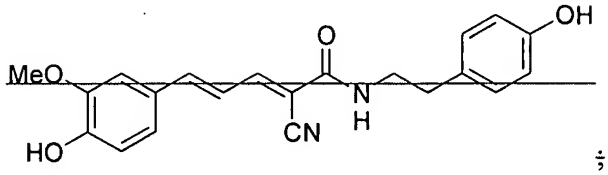
;



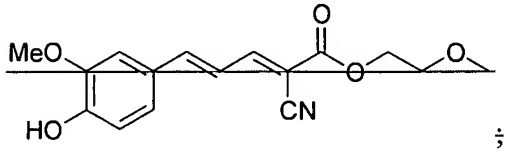
;



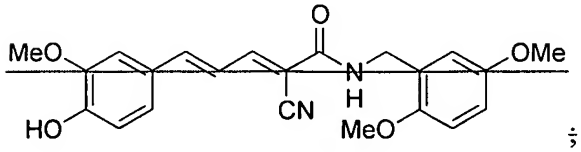
;



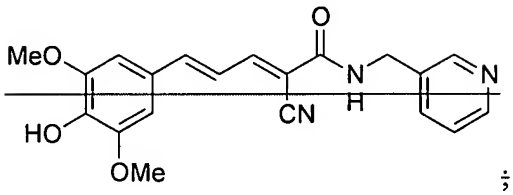
;



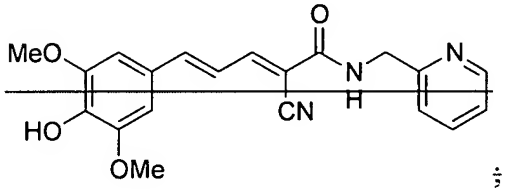
;



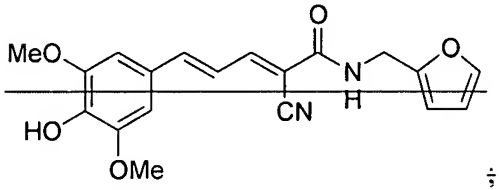
;


MeO
HO
OMe
O
N
H
CN
N

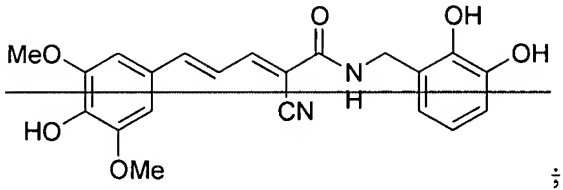
;


MeO
HO
OMe
O
N
H
CN
N

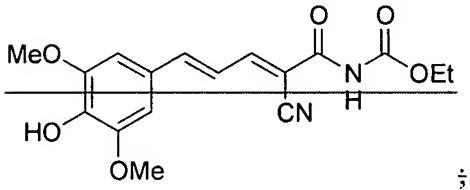
;


MeO
HO
OMe
O
N
H
CN
O

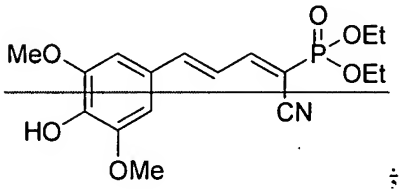
;


MeO
HO
OMe
O
N
H
CN
OH
OH

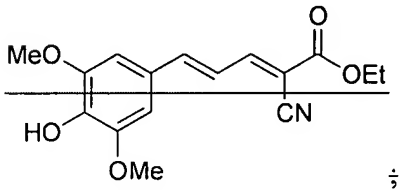
;


MeO
HO
OMe
O
O
N
H
CN
OEt

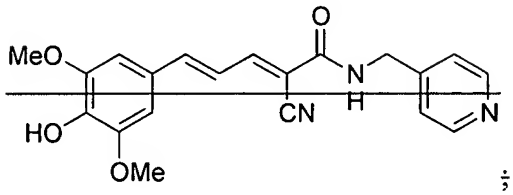
;


MeO
HO
OMe
O
P
OEt
OEt
CN

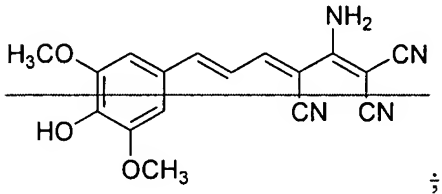
;


MeO
HO
OMe
O
OEt
CN

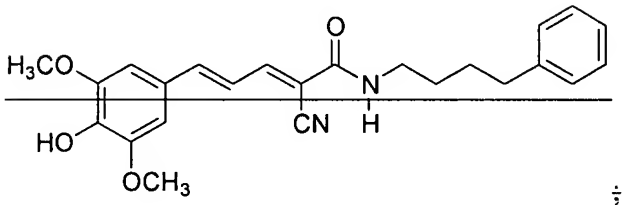
;



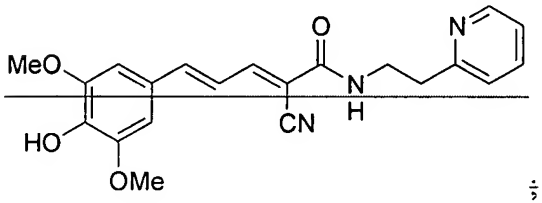
;



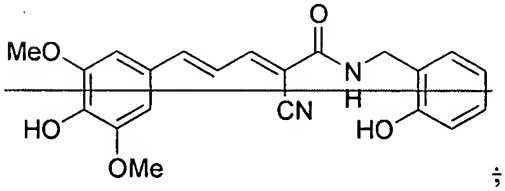
;



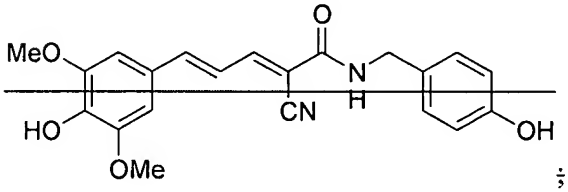
;



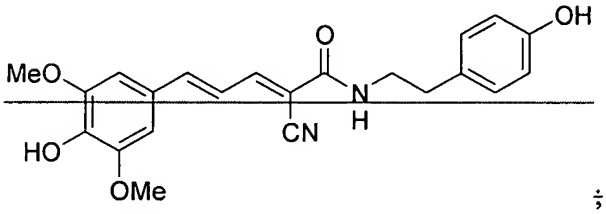
;



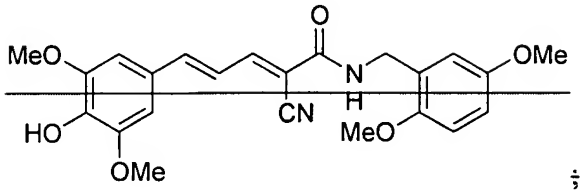
;



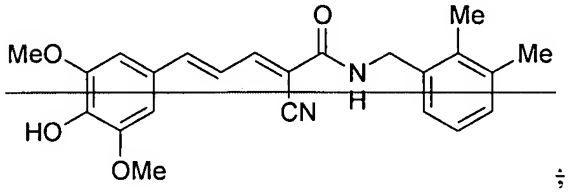
;



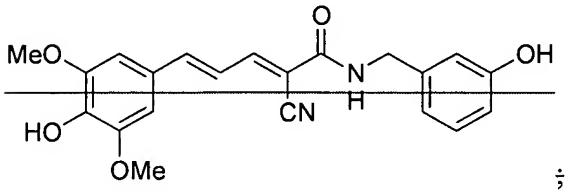
;


MeO
O
N
H
OMe
CN
HO
MeO
OMe

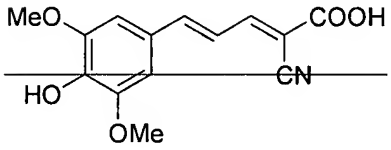
;

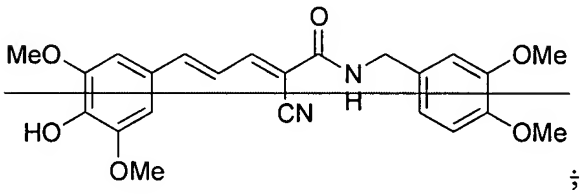

MeO
O
Me
N
H
Me
CN
HO
OMe

;

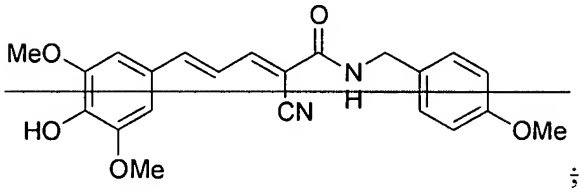

MeO
O
N
H
OH
CN
HO
OMe

;

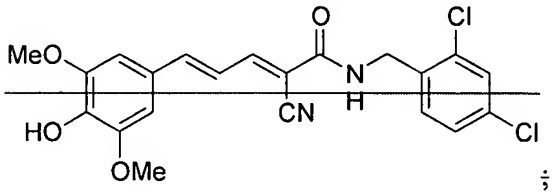

MeO
COOH
CN
HO
OMe


MeO
O
N
H
OMe
CN
HO
OMe
OMe

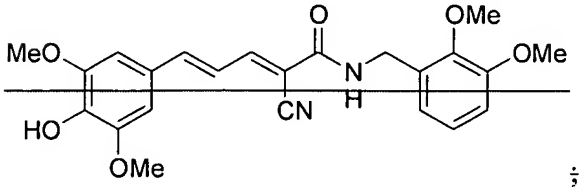
;


MeO
O
N
H
OMe
CN
HO
OMe

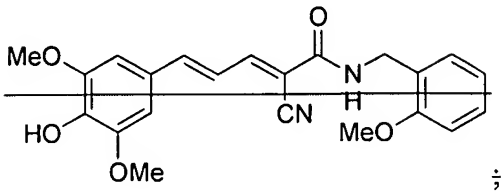
;


MeO
O
Cl
N
H
CN
HO
Cl
OMe

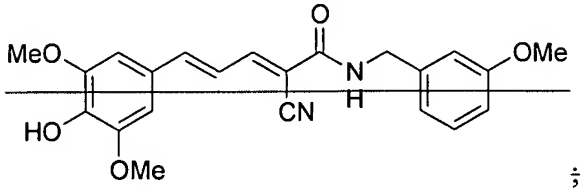
;


MeO
O
OMe
N
H
OMe
CN
HO
OMe

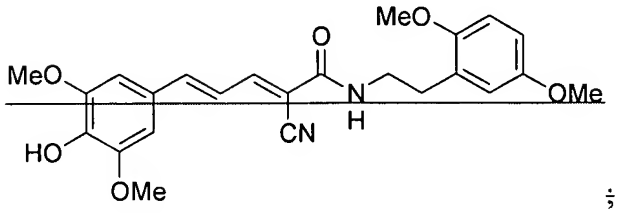
;



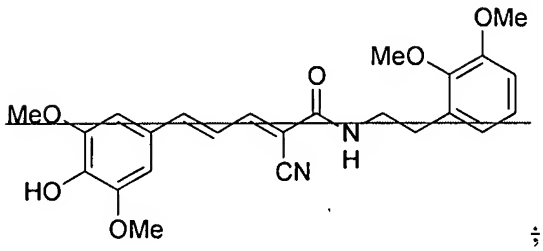
;



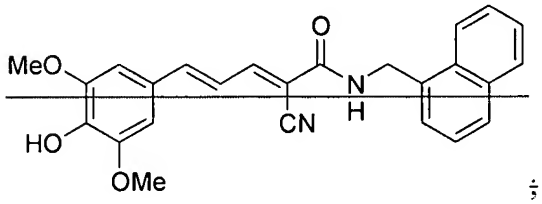
;



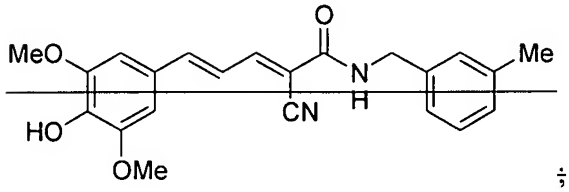
;



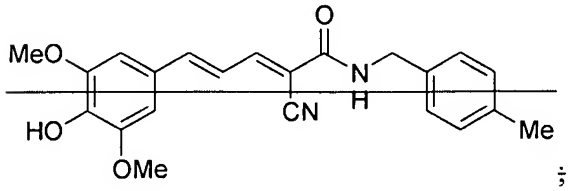
;



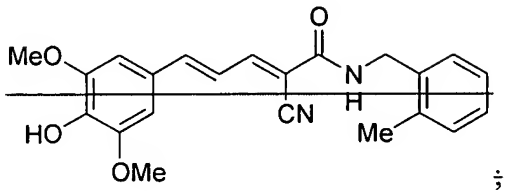
;



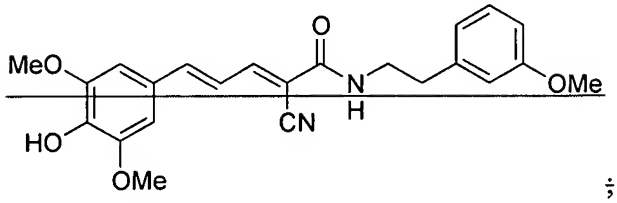
;



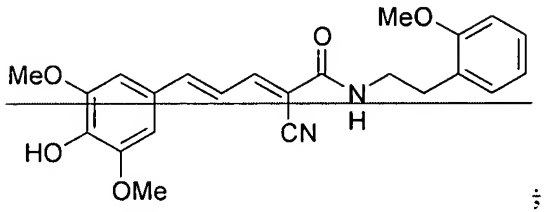
;


MeO
O
N
H
CN
Me
HO
OMe

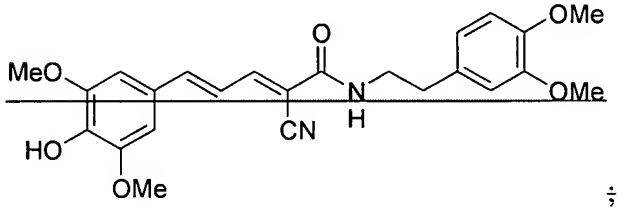
;


MeO
O
N
H
OMe
CN
HO
OMe

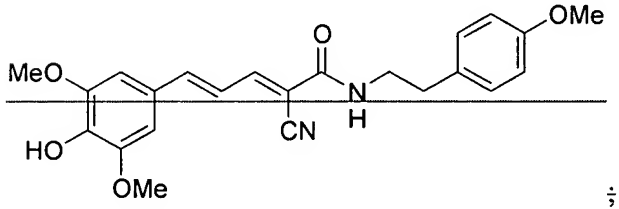
;


MeO
MeO
O
N
H
CN
HO
OMe

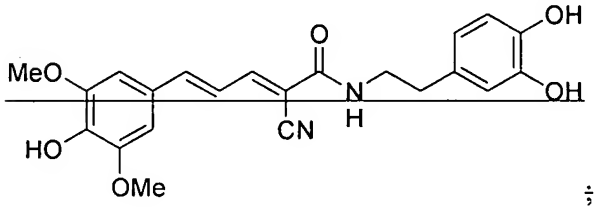
;


OMe
MeO
O
N
H
OMe
CN
HO
OMe

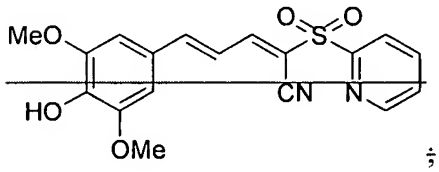
;


OMe
MeO
O
N
H
CN
HO
OMe

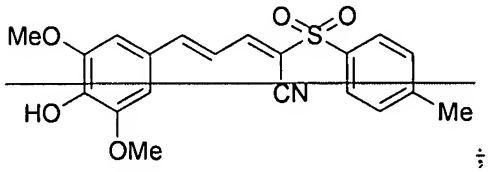
;

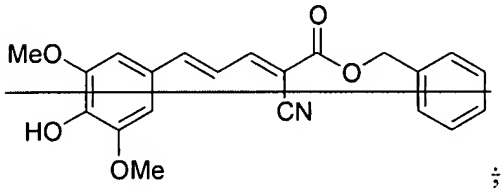

OH
MeO
O
N
H
OH
CN
HO
OMe

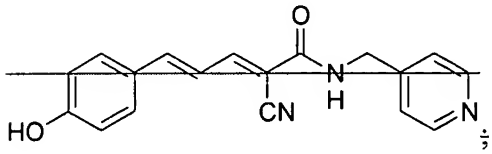
;

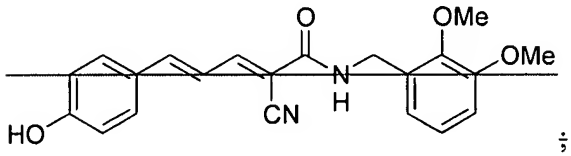

O
S
O
MeO
CN
N
HO
OMe

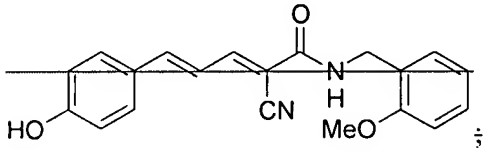
;

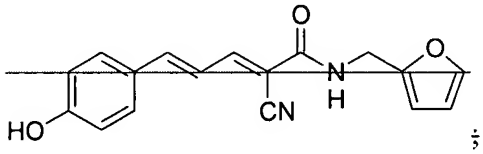

MeO
O
S
O
CN
HO
Me
OMe

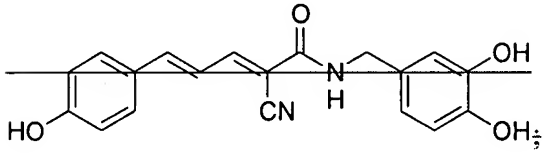

MeO
O
O
CN
HO
OMe

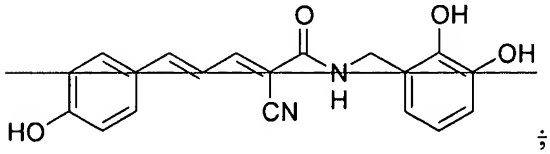

O
N
H
CN
HO
N

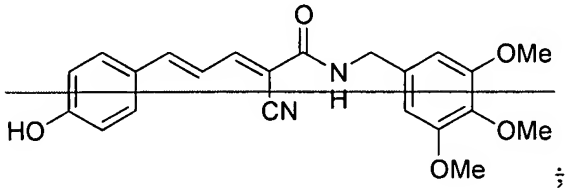

O
OMe
OMe
N
H
CN
HO

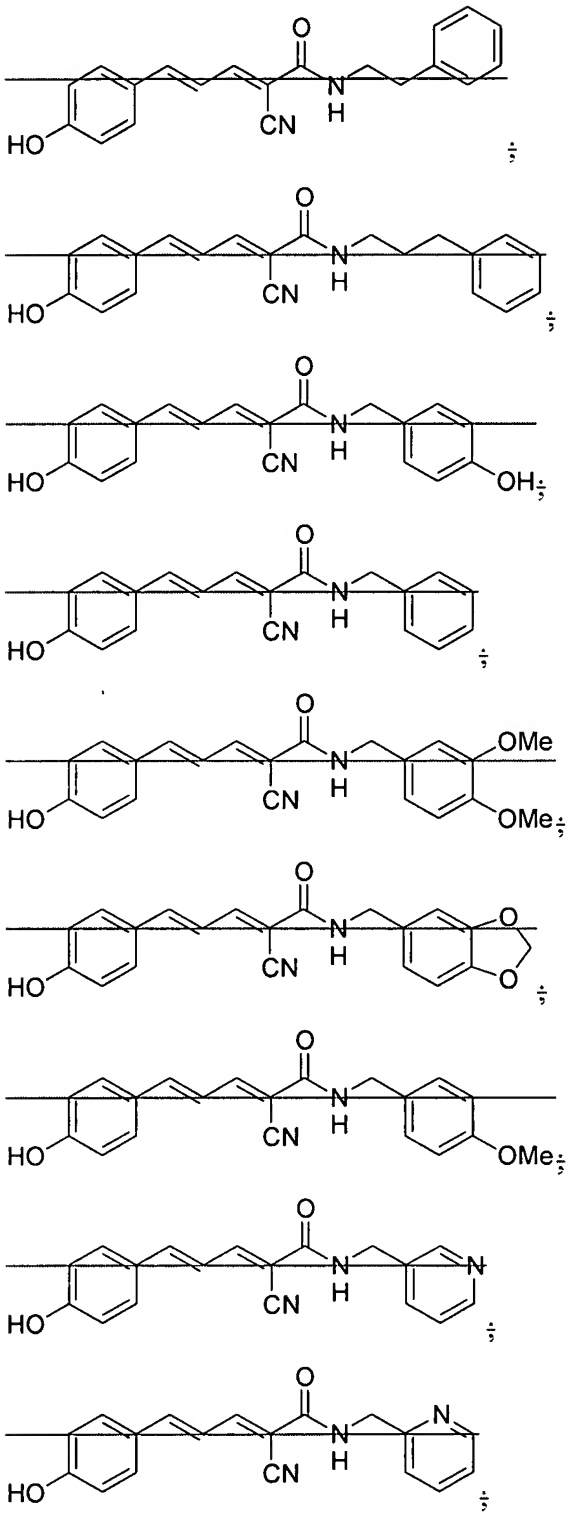

O
N
H
CN
HO
MeO

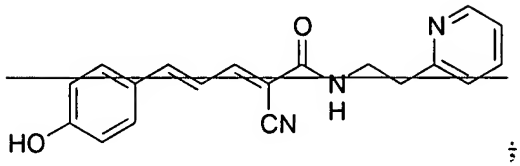

O
O
N
H
CN
HO


O
OH
N
H
CN
HO
OH

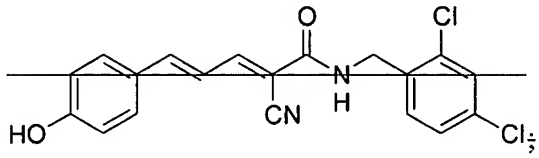

O
OH
OH
N
H
CN
HO


O
OMe
N
H
CN
OMe
HO
OMe

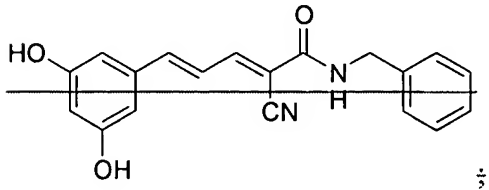




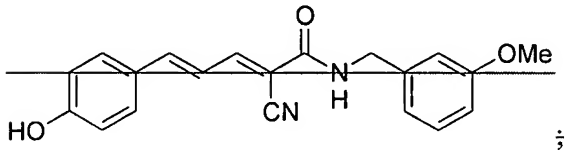
;



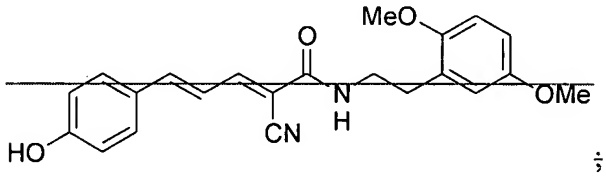
;



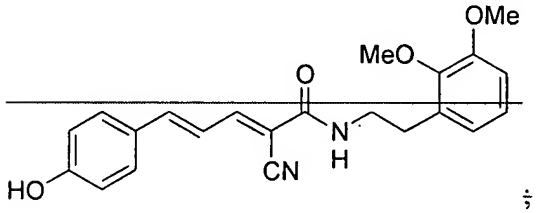
;



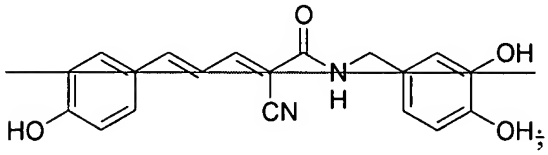
;



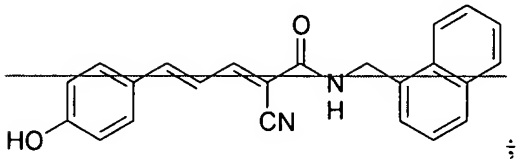
;



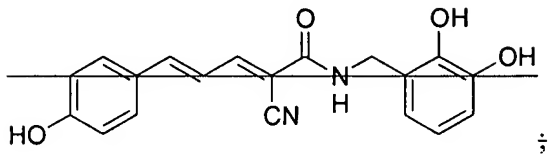
;

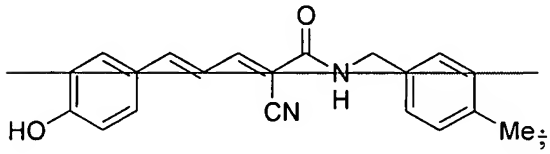


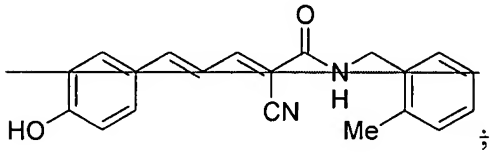
;

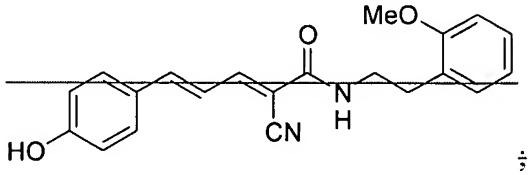


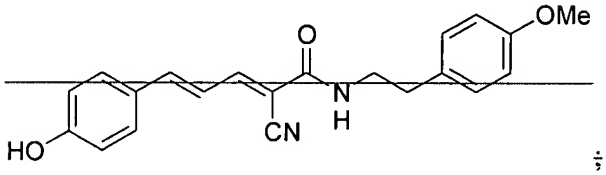
;

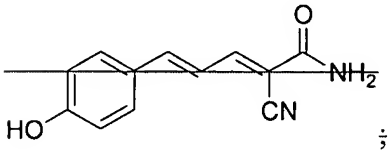


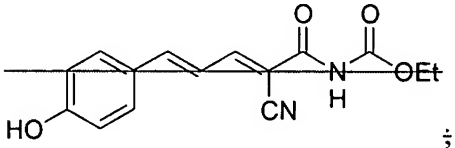


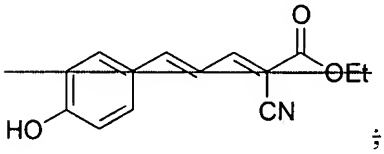


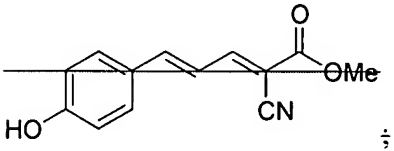


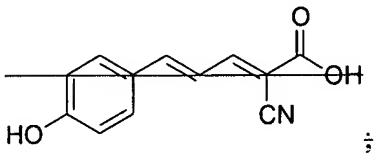




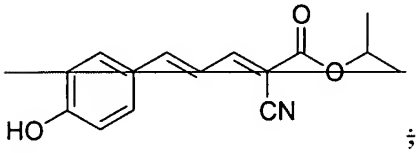




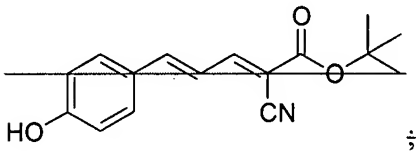



O
OH
CN
HO

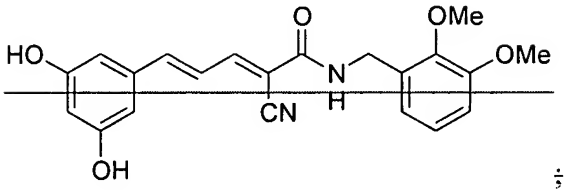
;


O
O
CN
HO

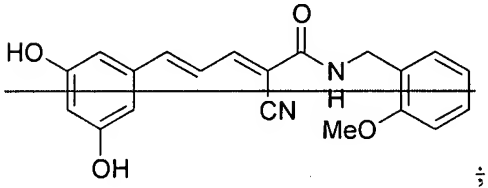
;


O
O
CN
HO

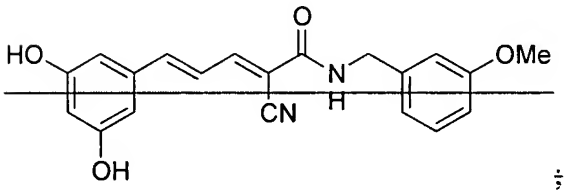
;


O
OMe
HO
OMe
N
H
CN
OH

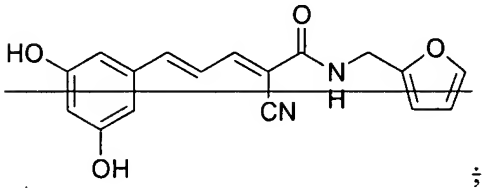
;


O
HO
N
H
CN
MeO
OH

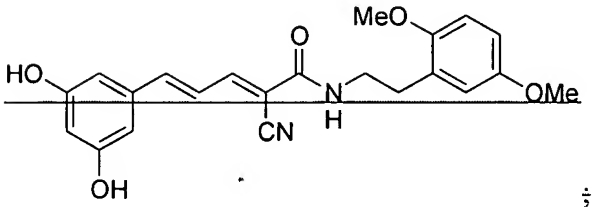
;


O
HO
OMe
N
H
CN
OH

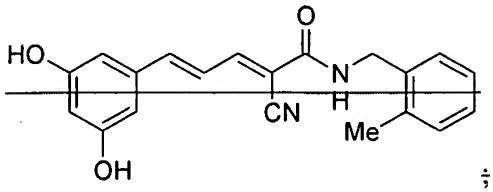
;


O
HO
O
N
H
CN
OH

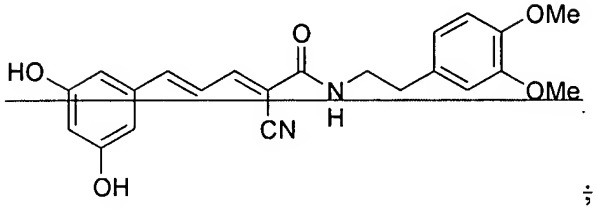
;


MeO
O
HO
OMe
N
H
CN
OH

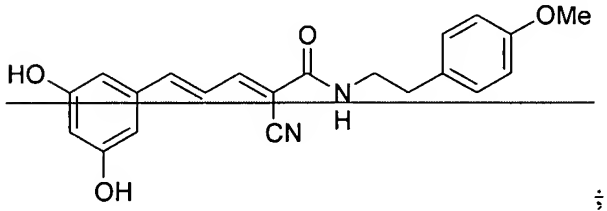
;


HO
O
N
H
CN
Me
OH

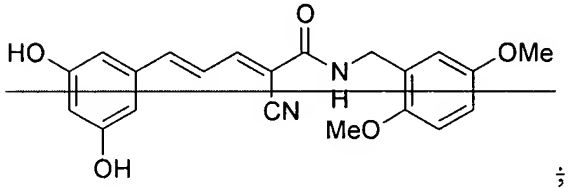
;


HO
O
N
H
CN
OMe
OMe
OH

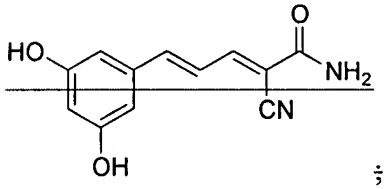
;


HO
O
N
H
CN
OMe
OH

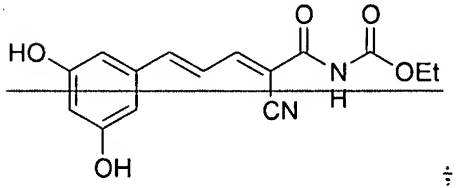
;


HO
O
N
H
CN
OMe
MeO
OH

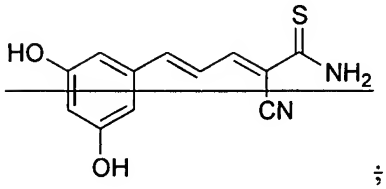
;


HO
O
NH2
CN
OH

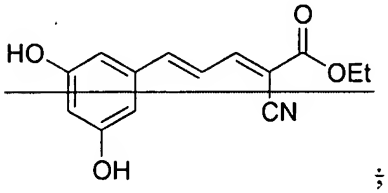
;


HO
O
O
N
H
OEt
CN
OH

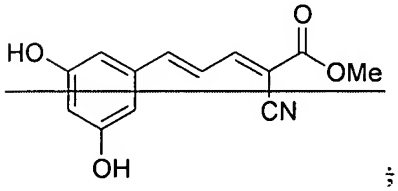
;


HO
S
NH2
CN
OH

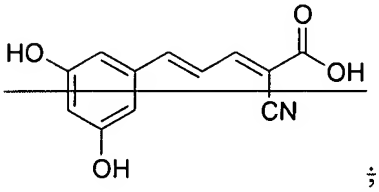
;


HO
O
OEt
CN
OH

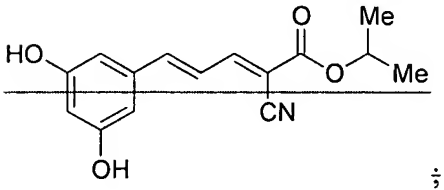
;


HO
O
OMe
CN
OH

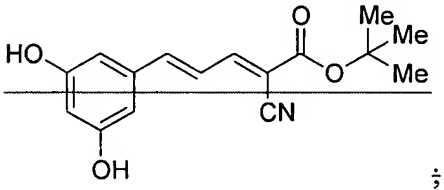
;


HO
O
OH
CN
OH

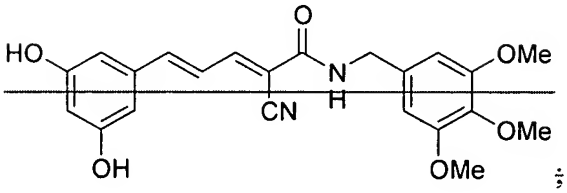
;


HO
O
Me
O
Me
CN
OH

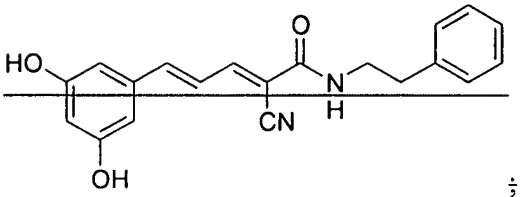
;


HO
O
Me
Me
O
Me
CN
OH

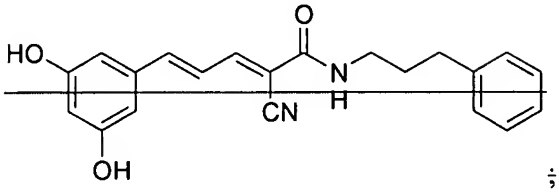
;


HO
O
N
H
OMe
OMe
OMe
CN
OH

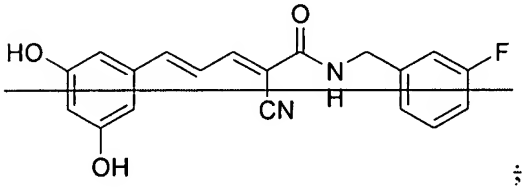
;


HO
O
N
H
CN
OH

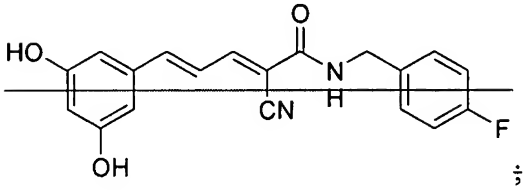
;



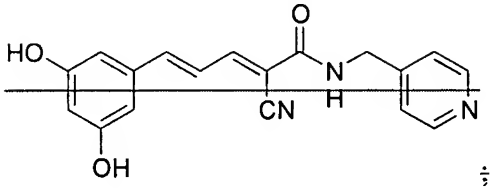
;



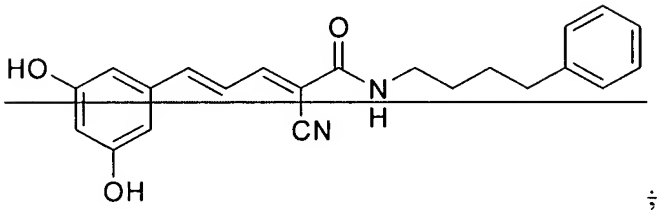
;



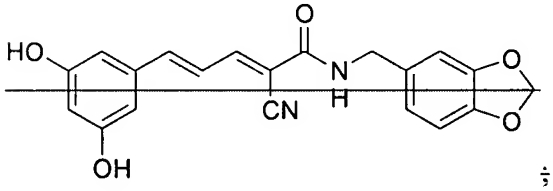
;



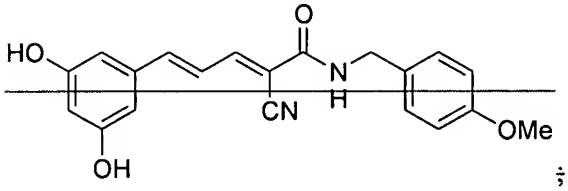
;



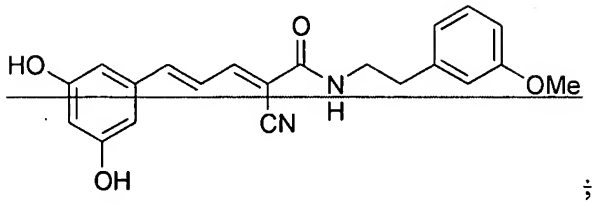
;



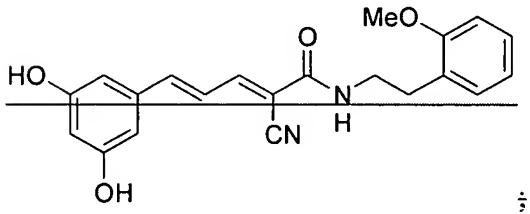
;



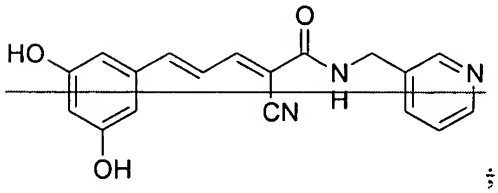
;


HO
O
N
H
CN
OMe
OH

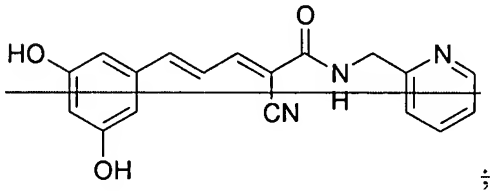
;


HO
O
N
H
CN
MeO
OH

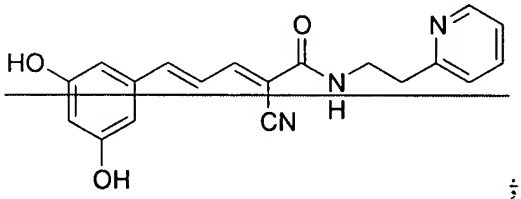
;


HO
O
N
H
CN
N
OH

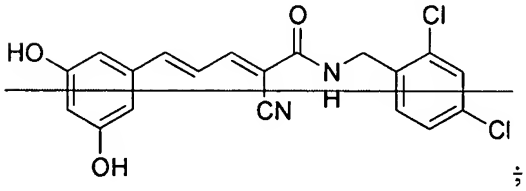
;


HO
O
N
H
CN
N
OH

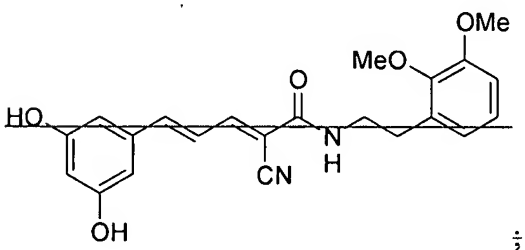
;


HO
O
N
H
CN
N
OH

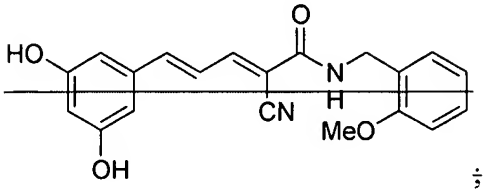
;


HO
O
N
H
CN
Cl
Cl
OH

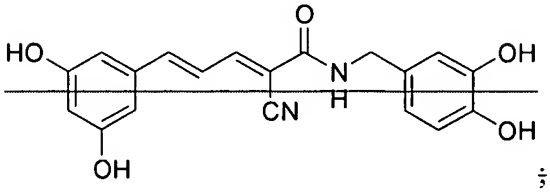
;


HO
O
N
H
CN
OMe
MeO
OH

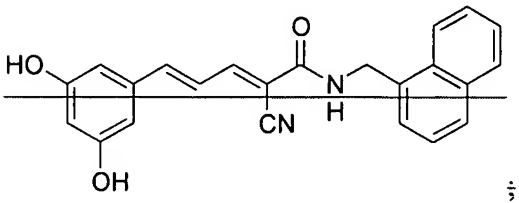
;


HO
O
N
H
CN
MeO
OH

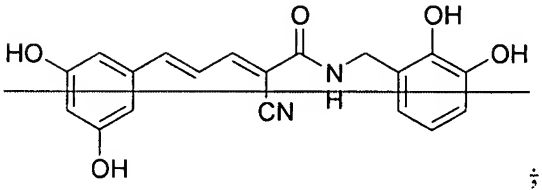
;


HO
O
N
H
CN
OH
OH
OH

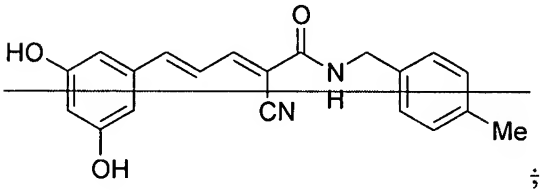
;


HO
O
N
H
CN
OH

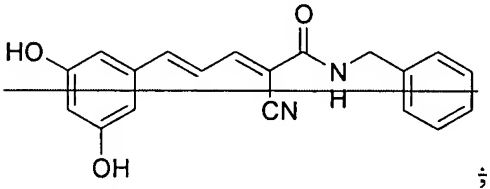
;


HO
O
N
H
CN
OH
OH
OH

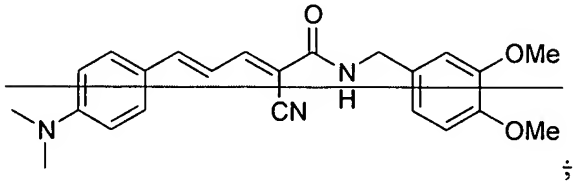
;


HO
O
N
H
CN
Me
OH

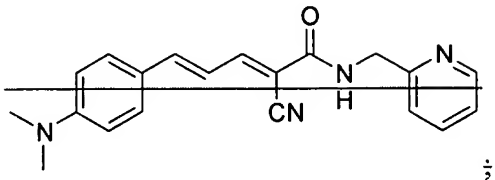
;


HO
O
N
H
CN
OH

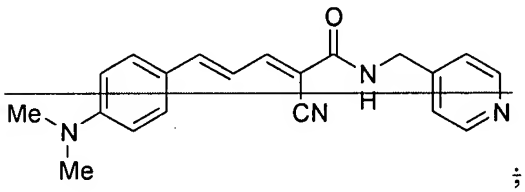
;


O
N
H
CN
OMe
OMe
N

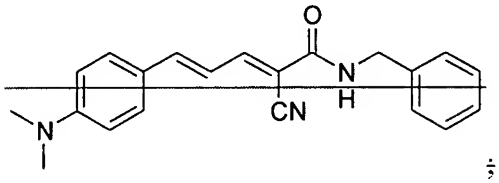
;



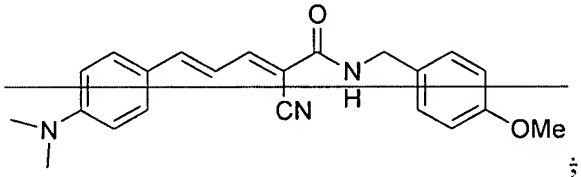
;



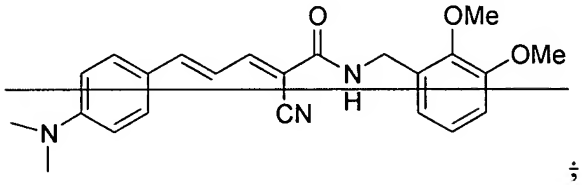
;



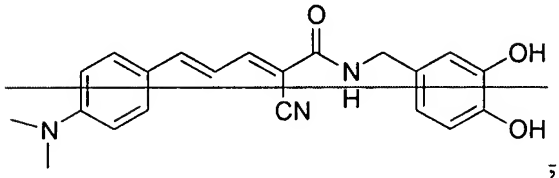
;



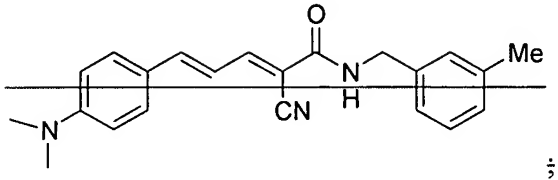
;



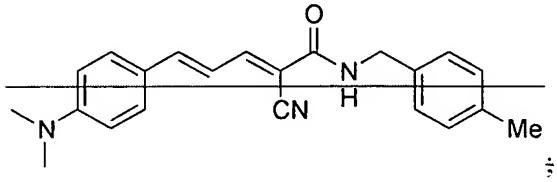
;



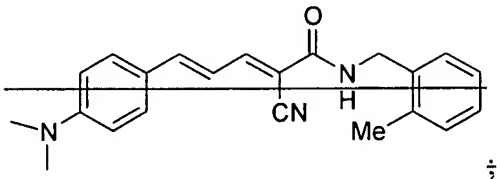
;



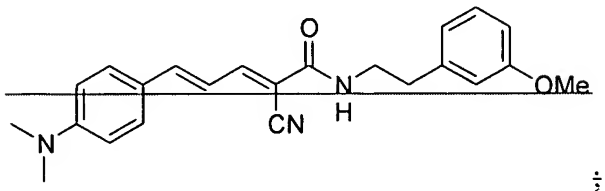
;



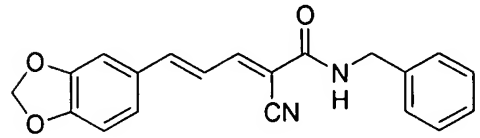
;



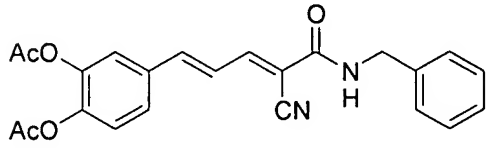
;



;



; and



.

21. (Currently Amended) A composition comprising a compound according to ~~any one of~~ claims 1 ~~to 20~~ in admixture with a pharmaceutically acceptable diluent or carrier.

22-29. (Cancelled).

30. (Withdrawn, Currently Amended) A method of modulating cell proliferation comprising administering an effective amount of a compound capable of modulating cell proliferation according to ~~any one of~~ claims 1 ~~to 20~~ or a composition according to claim 21 to a cell or animal in need thereof.

31. (Withdrawn, Currently Amended) A method of inhibiting cell proliferation comprising administering an effective amount of a compound capable of inhibiting cell proliferation according to ~~any one of~~ claims 1 ~~to 20~~ or a composition according to claim 21 to a cell or animal in need thereof.

32. (Withdrawn, Currently Amended) A method of inhibiting cancer cell proliferation comprising administering an effective amount of a compound capable of inhibiting cancer cell proliferation according to ~~any one of~~ claims 1 ~~to 20~~ or a composition according to claim 21 to a cell or animal in need thereof.

33. (Withdrawn, Currently Amended) A method of treating cancer comprising administering an effective amount of a compound capable of inhibiting cancer cell proliferation according to ~~any one of~~ claims 1 ~~to 20~~ or a composition according to claim 21 to a cell or animal in need thereof.

34. (Withdrawn) A method according to claim 32 or 33 wherein said cancer is a hematopoietic cell cancer.

35. (Withdrawn) A method according to claim 32 or 33 wherein said cancer is a leukemia, a lymphoma, a myeloma or a carcinoma.

36. (Withdrawn) A method according to claim 35 wherein said leukemia is acute lymphoblastic leukemia, aggressive Philadelphia+ leukemia, acute myelocytic leukemia, chronic myeloid leukemia, chronic lymphocytic leukemia or juvenile myelomonocyte leukemia,

37. (Withdrawn) A method according to claim 35 wherein said leukemia is acute lymphoblastic leukemia.